



Volume 32/Issue 7

Rubber Boa

March 2019

# RUBBER BOA

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# ~ Rubber Boa ~

**D**o you know that a boa constrictor lives in Idaho? Many people are surprised to learn that there is a boa constrictor found in our state. It is the rubber boa. Its scientific name is *Charina bottae* (CHA-ree-na BOW-tay). Charina means graceful. This is a fitting name! Rubber boas are graceful as they slide and slither over the ground.

Rubber boas got their name for how they look and feel. They have small scales, and the skin is loose on the body. This gives them the look and feel of rubber. It is sometimes hard to tell which end is the head and which end is the tail. Some people have given them the nickname of “two-headed snake” because the head and tail look so similar.

Rubber boas are one of the smallest members of the boa family. Baby rubber boas are six to nine inches long. Adult rubber boas rarely are longer than 30 inches

The color of rubber boas varies depending on the area in which they live. Adults are tan to brown to olive-brown in color on the top of their bodies. The bottom scales are cream or light yellow in color. Baby rubber boas are pinkish in color.

Most snakes lay eggs outside of their bodies in a nest. Rubber boas are different. The snakes develop in a special place in the mother's body. The mothers give birth to live babies. About four to five baby rubber boas are born in the late summer or early fall.

Rubber boas may be found throughout Idaho from deserts to pine forests. They need water and downed logs or leaf litter nearby. They are very shy and will burrow in soil and under logs and rocks when frightened. They spend most of the day safe in a burrow and come out at dusk or during the night. However, they may venture out of their burrows on a mild, cloudy day to look for food. Sometimes they are seen basking in the sun, but this is rare.

Rubber boas kill their prey by constriction just like larger boas. They wrap their bodies around their food and squeeze them to death. Rubber boas eat mice and other small mammals, small birds, lizards and lizard eggs. They may even eat other snakes! Rubber boas can go a long time without eating. They may go without food for as long as six months. This includes the time they are hibernating during the winter.

Rubber boas are gentle snakes and usually will not bite. Because of this, some people think they might make good pets. But it is important to remember that they are wild animals and are difficult to keep as pets. If you see a rubber boa, consider yourself lucky! Look at it quietly but do not touch it. Rubber boas are special snakes. We want them in our state for many years to come.



# REPTILES

When you think of a reptile, you may think of a snake or lizard. Maybe a turtle pops into your mind. People often think of reptiles as scaly, cold-blooded animals that usually lay eggs.

Some scientists that group, or classify, animals are starting to look at reptiles a bit differently. Some divide reptiles into four groups. The first group includes turtles. The second group is lizards and snakes, and the third group would be crocodiles and their relatives. The last group is the birds!

Some scientists put birds in this group because bird skulls and eggs are so similar to those of reptiles. These scientists believe the similarities between bird skulls and eggs and reptile skulls and eggs are more important than the differences between the two. They are not as concerned about the fact that birds are warm-blooded, and all other reptiles are cold-blooded. Believe it or not, when we look at the cells of crocodiles, birds, and lizards, crocodiles actually have more in common with birds than they do with lizards. You may be wondering about the feathers on birds. They don't look much like scales, but they really are scales that have changed over time to help birds fly. What do you think? Do you think birds should be in the reptile group? More evidence may be needed before a clear answer is reached.

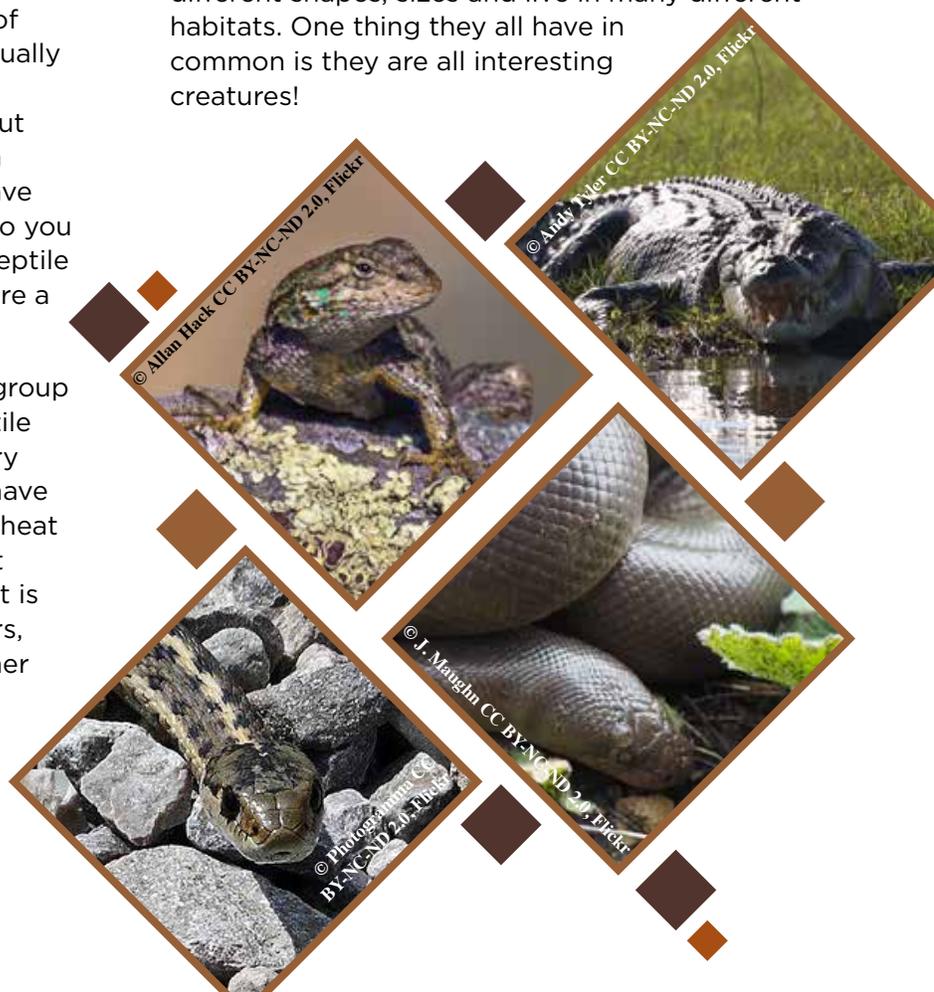
For now, let's leave birds out of the reptile group and take a closer look at what makes a reptile a reptile. You can find reptiles living on every continent except Antarctica. Most reptiles have a hard time staying warm. They can't make heat inside their bodies, so Antarctica would just be a giant freezer and graveyard for them. It is too cold! Since Idaho has pretty cold winters, we don't have as many reptiles as some other states. We have one turtle, 10 lizards and 11 snakes.

Most reptiles lay eggs but not all. In Idaho, we have two lizards, the alligator and the short-horned, that give birth to live young.

We also have four snakes that give birth to live young. The rubber boa, western rattlesnake, common garter snake and terrestrial garter snake all give birth to their young. By developing in the mother instead of in an egg, the young are better protected from predators and weather.

Reptiles are covered by a thick skin protected by scales. Scales are similar to your fingernails. They are made up of dead cells and form a kind of tough armor around the body. Scales offer protection from the sun and help reptiles retain water in their bodies. Lizards and snakes have scales on their bodies, and turtles have scales on their shells.

Reptiles come in all shapes and sizes. They can be really big. Saltwater crocodiles can grow to be over 23 feet long. Other reptiles are small. A gecko that lives on the British Virgin Islands is less than an inch long! Reptiles may come in different shapes, sizes and live in many different habitats. One thing they all have in common is they are all interesting creatures!



# Heads or Tails?

**D**o you think snakes need to protect themselves? Snakes, like other animals, need to watch out for danger. Snakes have many ways to do this.

The best thing a snake can do if it senses danger is to hide. Snakes usually slither away when they know people or animals are coming near. However, sometimes they don't move at all. Have you ever been walking on a trail and had a snake right in front of you? You may have almost stepped on the snake or thought the snake was dead. Many snakes use camouflage to blend into their surroundings. The color and pattern of their scales make them hard to see. The brown color on rubber boas help them blend into the shadows on the forest floor. Gopher snakes are another example. Their sandy-brown color with blotches of brown and black help them blend into Idaho's deserts. They are difficult to see until they move.

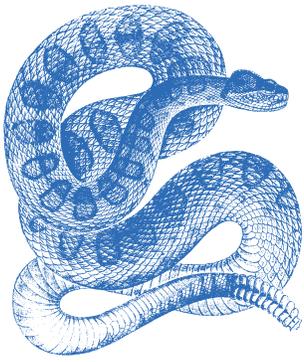
If hiding doesn't work and snakes feel threatened, they will defend themselves in many ways. People often think that all snakes act aggressively when they see humans.

This is not true! Only when snakes feel threatened or in danger will they act aggressively.

We may be most familiar with snakes that coil up, puff up their bodies and raise their heads. They may look like they are ready to strike. Some snakes do this against predators, but other snakes don't. Rubber boas coil up and hide their heads, the most important part of their bodies. They then stick out the tail and move it around like a head. Animals may attack the tail thinking it is the head. This keeps the head safe. Ball pythons coil up and hide their heads, too. A few snakes play dead by rolling on their backs, opening their mouths and hanging out their tongues.

How do you avoid threatening a snake? Walk away slowly if you see a snake. Never get close to or pick up a snake in the wild. When you are hiking or walking where snakes live, watch where you walk. Don't step on a snake! Remember snakes will only defend themselves if you threaten them.





# DO SNAKES REALLY HAVE COLD BLOOD?

If you hear an animal is cold-blooded, does that mean the animal's blood is actually cold? Well, not really. It means they are the same temperature as their surroundings. If a snake is lying on sand that is 60 degrees, the snake will also be 60 degrees. Snakes, lizards, turtles, insects, fishes and frogs are all cold-blooded animals.

Some people call cold-blooded animals ectothermic (ek-to-THER-mik) animals. Ecto means outside, and therm means heat. Ectothermic animals get heat from outside their bodies. You may also hear people call them poikilotherms (poy-KEE-lo-therms). This is just a fancy word for a cold-blooded animal.

Cold-blooded animals are most active in warm weather. Cold weather slows down their muscles. That's why cold-blooded animals lay or bask in the sun. The sun helps to warm them up. If they get too warm, they need to move to a shady

spot or go in a burrow. Colder weather can kill cold-blooded animals. They need to migrate to warmer places or move underground. Some cold-blooded animals, like bees and dragonflies, shiver to stay warm.

Cold-blooded animals have a real advantage in deserts. Deserts are warmer, and food is often harder to find. Cold-blooded animals don't need to eat as much as warm-blooded animals. Sometimes they can go months between meals. This is why you often see more cold-blooded animals living in deserts than warm-blooded animals.

Calling an animal cold-blooded may be a bit confusing. Next time you are talking about a "cold-blooded" animal, how about calling it an ectothermic animal or a poikilotherm? You may teach others a new word and teach them the true meaning of the term "cold-blooded."



# GRABBING GRUB

Catching prey can be tricky for snakes. It's a challenge to catch animals without any legs to chase them down. How about trying to grab a hold of a dashing mouse without feet to pounce? Because of their lack of limbs, snakes have developed some intriguing methods to capture their prey.

Some snakes use venom to capture prey. Venoms are chemicals that have toxic effects in the bodies of other animals. Snake venoms either paralyze muscles or cause bleeding to destroy muscles. Snake venoms also have a bit of a digestive function. They start to break down the prey so it will be easier to eat, but this is not as important as making sure the prey cannot run away. Pit vipers, like our rattlesnake, have the most complex venoms of any snakes. Their venom will paralyze and destroy muscles. The snakes with the deadliest venoms are sea snakes. Their venom would instantly kill a human. Luckily for us, sea snakes are not aggressive snakes and rarely bite humans. Sometimes a snake will bite and not inject venom. Snakes can and do control the amount of venom that is released during a bite.

Other snakes constrict or squeeze their prey to death. This is how a rubber boa kills its prey. Constricting snakes strike and grab animals with their mouths. Then they wrap their bodies around the animal and squeeze. Some people think that snakes crush the animal to death, but they don't. Most often the animal's bones are not even broken. The snakes hold tightly to prevent the animal from breathing or put so much pressure on the chest cavity that the heart stops beating and blood stops flowing. Blood cannot get to the brain. Snakes monitor their prey's heartbeat, so they know when their prey is dead.

Other snakes, like garter snakes, don't use venom or constriction to subdue their prey. They hunt by peering and craning their necks and bodies around obstacles in their habitat. Once they locate prey, they use their quick reflexes to ambush the prey and grab it with their sharp teeth. Their saliva is slightly toxic to their prey, so it helps to immobilize the prey. This makes it easier for garter snakes to swallow their meal.

Even with a lack of limbs, snakes are efficient predators. Whether they use venoms, constriction or a stealthy grab and go method, snakes have ways to keep their prey from slipping away.



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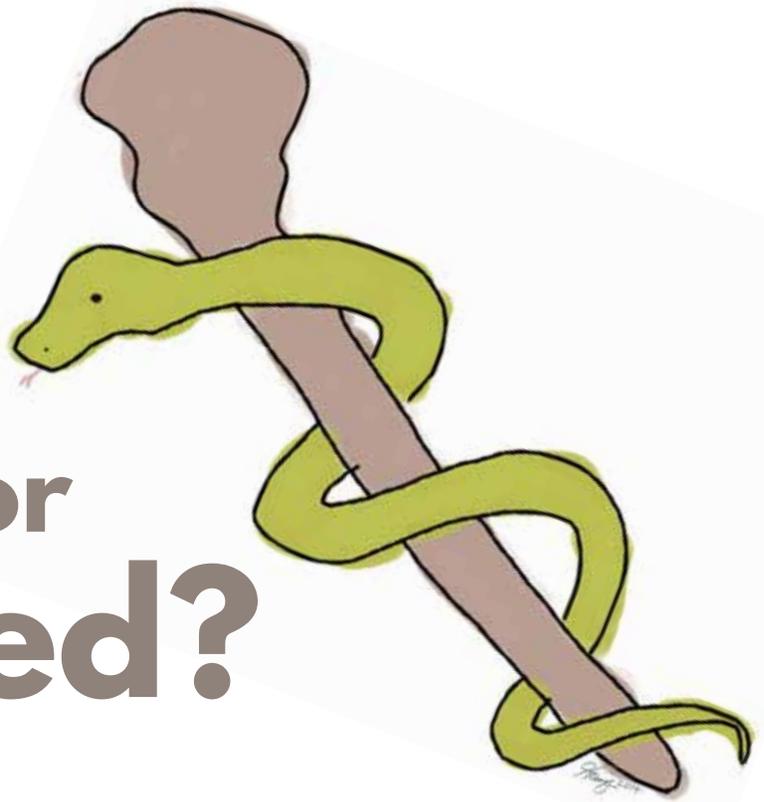


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# Snakes – Sinister or Sacred?



Throughout time, snakes have conjured deep feelings within people. Snakes have played many roles in myths, legends and literature around the world. While some people may see snakes as evil, others see them as good. Snakes have represented both life and death.

Sometimes snakes are seen as a life force associated with water and the earth. Snakes live on land, in burrows and in water. Many people thought snakes were directly connected to water, rain or the earth. Ancient Chinese thought that snakes brought life-giving rain. During a rainstorm, water would flood into the snake burrows and force the snakes to crawl up on land. The people saw the snakes when it rained and thought the snakes were responsible for the rain falling. In Australia, India, Africa and North America, some native people connected snakes with rainbows.

As snakes grow, they shed their skin revealing a new skin underneath. Because of this, snakes have been seen as symbols of rebirth, immortality and healing. Ancient Greeks respected snakes; they thought snakes were sacred. The Greek God Asclepius carried a staff with one or two snakes wrapped around it. This symbol, the staff wrapped in snakes, has become the symbol for doctors today. Both Ancient Greeks and Egyptians thought the snake represented ever-lasting life. The Greek symbol for eternity is a snake curled into a circle biting its own tail.

Sometimes snakes are seen as frightening or evil. They are often portrayed as enemies of humans or keepers of the underworld. Maybe this is because some snakes are venomous, and their bites are dangerous. Snakes are often depicted in Aboriginal paintings in Australia. Australia has some of the deadliest snakes in the world. In Norse mythology, the monster Nidhogg, or dread biter, was an evil serpent. It coiled around one of the roots of the World Tree. Nidhogg was forever trying to kill the tree by biting or squeezing the roots.

In medieval Europe, people were told tales of the basilisk. The basilisk could kill people just by looking or breathing on them. The basilisk was also used in the book Harry Potter and the Chamber of Secrets to do the bidding of the evil Lord Voldemort.

Snakes have played many roles in myths, legends and literature – some good, some bad. No doubt these stories have influenced people's feelings toward snakes. How do you feel about snakes?





BE OUTSIDE  
IDHO CHILDREN IN NATURE

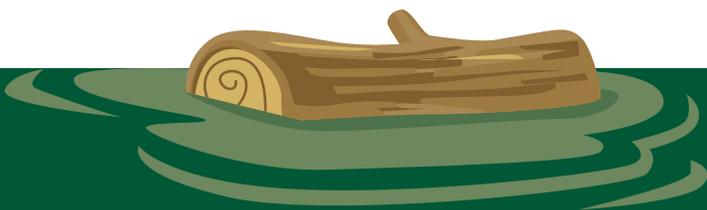
# Go Herping!

**H**ave you ever heard of herpetology? In Greek, herp means creeping, so herpetology is the study of creeping things. It is the study of reptiles and amphibians. Many people just call them “herps” for short.

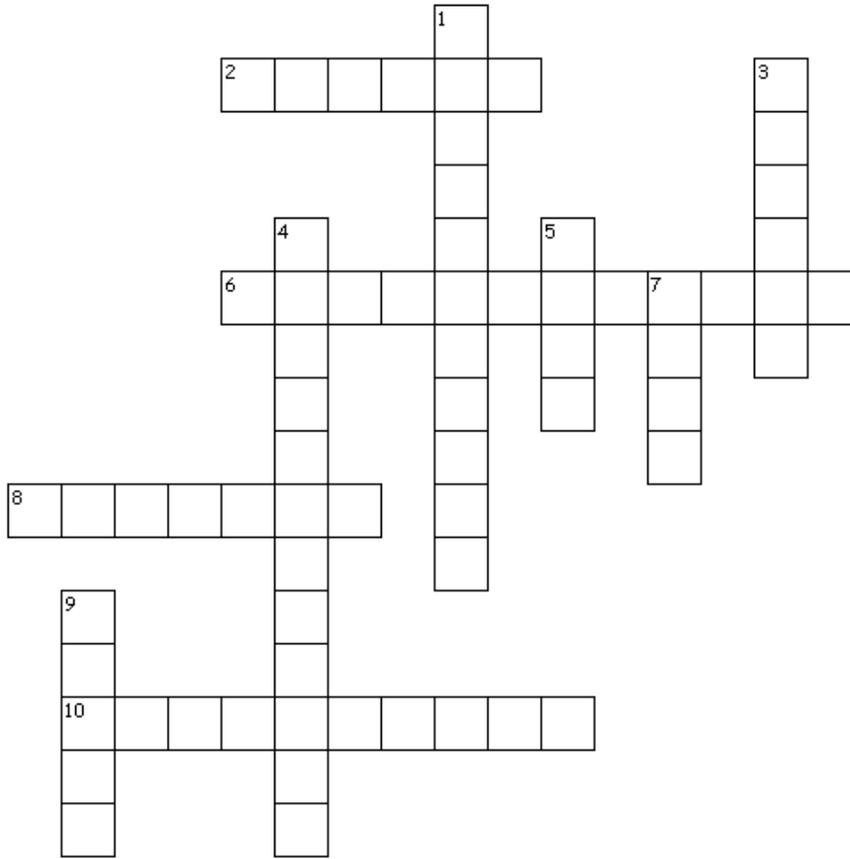
It is fun to look for amphibians and reptiles and learn about what they need to survive. If you want to go “herping” and look for reptiles or amphibians, here are some things to keep in mind. You are more likely to see an amphibian or reptile in the spring during breeding seasons, so now is a good time to go looking. Use a good sturdy stick to flip things over. Many herps hide under rocks, logs and leaves, so looking under things is a good place to start.

If you would like to get a close look at an amphibian or reptile, place the animal in a clear plastic box. Amphibians will probably need a bit of water in the box. Herps can bite! Use a net and wear thick leather gloves when handling animals and never handle a rattlesnake. Once you are done looking at your herp, put it back where you found it. Although it may seem fun to keep herps as pets, it can be tricky keeping them alive. Wild animals belong in the wild.

Herpetology can be a fun! Read books and watch videos to learn more about amphibians and reptiles. Then go exploring and look for herps around your neighborhood.



# Rubber Boa Criss-Cross Puzzle



## Across

2. Rubber boas look and feel like \_\_\_\_\_.
6. This is how rubber boas kill their prey.
8. Snakes are a type of \_\_\_\_\_.
10. Most snakes are not \_\_\_\_\_.

## Down

1. This is the study of creeping things.
3. Rubber boas will \_\_\_\_\_ in soil when frightened.
4. This is a fancy name for a cold-blooded animal.
5. Rubber boas give birth to \_\_\_\_\_ young.
7. The head and \_\_\_\_\_ of a rubber boa look similar.
9. A \_\_\_\_\_ wrapped in snakes is a symbol for doctors.

## Words

Aggressive  
Burrow  
Constriction  
Herpetology  
Live  
Poikilotherm  
Reptile  
Rubber  
Staff  
Tail

## WILDLIFE EXPRESS

Volume 32 • Issue 7 • Rubber Boa • March 2019

Wildlife Express is published nine times a year  
(September-May)  
by the Idaho Department of Fish and Game

Lead Writer: Adare Evans

Layout: Glenna Gomez

Contributors: Adare Evans, Vicky Runnoe



WE WOULD LIKE TO HEAR FROM YOU!

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